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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,173	01/18/2002	Brian J. Malone	01-1008-A	4542

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EXAMINER

CHOI, JACOB Y

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,173

Applicant(s)

MALONE ET AL.

Examiner

Jacob Y Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the conductive layer also forms a reflective coating on the substrate must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. (USPN 6,290,380).

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Regarding claim 16, Suzuki et al. clearly discloses a conductive layer (figure 4) for one or more electrical circuits deposited on the substrate.

4. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by either Hancox (USPN 4,246,632) or Forish (USPN 5,529,535) or Harris (USPN 4,047,018).

Regarding claim 16, either Hancox or Forish or Harris clearly discloses a conductive layer for one or more electrical circuits deposited on the substrate.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Suzuki et al. (USPN 6,290,380) or Hancox (USPN 4,246,632) or Forish (USPN 5,529,535) or Harris (USPN 4,047,018).

Regarding claim 17, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this (conductive layer is formed by vacuum deposition of the electrical circuits on the substrate) limitation has not been given patentable weight.

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Regarding claim 18, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose the conductive layer is directly embedded in the substrate.

Regarding claim 19, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose one or more openings in the lamp housing for one or more light sources.

Regarding claim 20, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose one or more terminals attached to the conductive layer at the openings.

Regarding claim 21, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, except for the light sources comprise one or more light emitting diodes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilized LEDs rather than incandescent lamps, since the examiner takes Official Notice of the equivalence of LEDs and incandescent lamps for their use in the vehicle lamp and the selection of any of these known equivalents would be within the level of ordinary skill in the art.

Regarding claim 22, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose the light source comprise one or more incandescent lamps.

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Regarding claim 23, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Forish and Harris disclose further comprising a reflective coating.

Regarding claim 24, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. disclose the conductive layer also forms a reflective coating on the substrate.

Regarding claim 25, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose further comprising a seal.

Regarding claim 26, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose further comprising a protective coating on the conductive layer.

Regarding claim 27, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, except for the conductive layer is 1 to 4 microns thick. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the conductive layer to be 1 to 4 micron thick, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 28, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and

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Forish and Harris disclose further comprising a single connection for electrically connecting the circuits to one or more power sources.

Regarding claim 29, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose the housing comprises one or more molded channels to facilitate receipt of the conductive layer.

Regarding claim 30, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose the housing comprises one or more smooth corners to facilitate receipt of the conductive layer.

6. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Suzuki et al. (USPN 6,290,380) or Hancox (USPN 4,246,632) or Forish (USPN 5,529,535) or Harris (USPN 4,047,018) as applied to apparatus claims 16-30 in above, and further in view of either Longueville et al. (USPN 5,785,534) or Crotzer et al. (USPN 5,977,489).

It has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961). Also, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight. In addition, either Longueville et al. (column 7, lines 35-50) or Crotzer et al. (column 8, lines 10-60) teaches that it is known to apply electrical

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conductive to the substrate by utilizing spraying method. Therefore, it would have been obvious to deposit a layer of conductive material on a substrate that forms part of the lamp housing, in order to form part of one or more electrical circuits when the conductive material is connected to at least one or more power sources and one or more light sources & deposit of the layer of conductive material is deposited by vacuum deposition & the layer of conductive material is deposited by sputter vacuum deposition & the layer of conductive material is deposited by cathodic arc vacuum deposition & the layer of conductive material is deposited by E-beam vacuum deposition & the layer of conductive material is metal & the layer of conductive material is deposited by direct metallization of the conductive material onto the substrate & a step of forming distinct electrical pathways in the layer of conductive material during deposition & the distinct electrical pathways are formed by masking the lamp housing prior to deposition of the layer of conductive material on the lamp housing & a step of depositing a reflective coating on the substrate & the conductive material is also reflective so as to form a reflective coating on the substrate & a step of applying a spray seal on the substrate & a step of applying a protective coating to the conductive material & the step of depositing a conductive layer further comprises depositing one or more terminals for contacting the light sources & the step of depositing a conductive further layer comprises depositing at least one connection for electrically connecting the conductive layer to the power sources.

Conclusion

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mazis (USPN 4,504,891) – fluorescent lamp system

Suzuki et al. (USPN 6,083,012) – rear combination lamp

D. F. Salter (USPN 3,511,982) – lamp holders

Roney (USPN 4,922,395) – electrically conductive track circuit for shock mounting a bulb, a blank for such a track circuit, method of making same, and a lamp assembly having same

Buddle et al. (USPN 4,774,637) – motor vehicle light connector terminal

Segaud (USPN 5,673,995) – support element for a motor vehicle indicating display, and a method of making IT

Shelnut et al. (USPN 6,506,979 – sequential build circuit board


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y Choi whose telephone number is (703) 308-4792. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-7724.

JC
April 15, 2003



Sondra O'Shea
Supervisory Patent Examiner
Technology Center 2800